

# REPORT DOCUMENTATION PAGE

FORM APPROVED - - - OMB NO. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the office of management and budget, paperwork reduction project (0704-0188) Washington, DC 20503

1. AGENCY USE ONLY (LEAVE BLANK)		2. REPORT DATE 05 MAY 2010		3. REPORT TYPE AND DATES COVERED STUDENT RESEARCH PAPER	
4. TITLE AND SUBTITLE ADAPTIVE ARMY: EMBRACING THE CONCEPT OF OPERATIONAL MANOEUVRE FROM THE SEA.				5. FUNDING NUMBERS N/A	
6. AUTHOR(S) MAJOR A.R. COLLINGBURN, AUSTRALIAN ARMY					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) UNITED STATES MARINE CORPS COMMAND AND STAFF COLLEGE MARINE CORPS UNIVERSITY 2076 SOUTH STREET MARINE CORPS COMBAT DEVELOPMENT COMMAND QUANTICO, VIRGINIA 22134-5068				8. PERFORMING ORGANIZATION REPORT NUMBER NONE	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) SAME AS # 7				10. SPONSORING/MONITORING AGENCY REPORT NUMBER: NONE	
11. SUPPLEMENTARY NOTES NONE					
12A. DISTRIBUTION/AVAILABILITY STATEMENT NO RESTRICTIONS				12B. DISTRIBUTION CODE N/A	
13. ABSTRACT (MAXIMUM 200 WORDS) On May 2, 2009, the Australian Government released its 2009 Defence White Paper (WP09). The document serves as the national defence strategy and reinforces the fact that Australia is a maritime nation with its primary operating environment (POE) being the sea-air gap to the north of the country. WP09 also provides confirmation of future capabilities, including two Landing Helicopter Dock ships that the Royal Australian Navy (RAN) will procure by 2016. The acquisition demonstrates a commitment to an amphibious warfare capability that has been effectively nonexistent within the Australian Defence Force since the end of World War II.  Amphibious warfare requires more than just a maritime component. Amphibious implies sea based soldiers that are capable of projecting ashore for land operations. For this role, the Australian Army is best suited, and therefore must collaborate with the RAN to ensure optimisation of the new amphibious warfare capability.  This paper will draw on lessons learned from the United States Marine Corps' Marine Expeditionary Unit to explain how the Australian Army can best contribute to the new amphibious capability. It will be shown that the army will achieve this by establishing a standing expeditionary battle group (EBG) that is permanently embarked with the RAN's amphibious ready group. The EBG will be a deployed asset, postured to respond rapidly to any contingency within the POE, including Australia's littoral environment.					
14. SUBJECT TERMS (KEY WORDS ON WHICH TO PERFORM SEARCH) AUSTRALIAN ARMY EXPEDITIONARY BATTLE GROUP 2009 DEFENCE WHITE PAPER AMPHIBIOUS WARFARE CAPABILITY				14. NUMBER OF PAGES: 36 PAGES	
				16. PRICE CODE: N/A	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED		18. SECURITY CLASSIFICATION OF THIS PAGE: UNCLASSIFIED		19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	
20. LIMITATION OF ABSTRACT					

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Command and Staff College  
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Quantico, Virginia 22134-5068*

**MASTER OF MILITARY STUDIES**

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**ADAPTIVE ARMY: EMBRACING THE CONCEPT OF OPERATIONAL  
MANOEUVRE FROM THE SEA.**

SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF MILITARY STUDIES

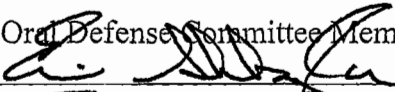
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References to this study should include the foregoing statement.

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### *Executive Summary*

**Title:** Adaptive Army: Embracing the Concept of Operational Manoeuvre from the Sea.

**Author:** Major Ashley R. Collingburn.

**Thesis:** The Australian Army can best contribute to the Australian Defence Force's (ADF's) new amphibious warfare capability by establishing a standing Expeditionary Battle Group (EBG).

**Discussion:** On May 2, 2009, the Australian Government released its 2009 Defence White Paper (WP09). The document serves as the national defence strategy and reinforces the fact that Australia is a maritime nation with its primary operating environment (POE) being the sea-air gap to the north of the country. WP09 also provides confirmation of future capabilities, including two Landing Helicopter Dock ships that the Royal Australian Navy (RAN) will procure by 2016. The acquisition demonstrates a commitment to an amphibious warfare capability that has been effectively nonexistent within the ADF since the end of World War II.

Amphibious warfare requires more than just a maritime component. Amphibious implies sea based soldiers that are capable of projecting ashore for land operations. For this role, the Australian Army is best suited, and therefore must collaborate with the RAN to ensure optimisation of the new amphibious warfare capability. This paper will draw on lessons learned from the United States Marine Corps' Marine Expeditionary Unit to explain how the Australian Army can best contribute to the new amphibious capability. Accordingly, it will be shown that the army will achieve this by establishing a standing EBG that is permanently embarked with the RAN's amphibious ready group.

The EBG will effectively provide the army with a capability that can replace one of the high readiness battle groups that currently remains postured in either Darwin or Townsville for potential overseas contingency operations. Moreover, the EBG will not only train for, but also physically execute joint operations on an eight month rotational basis. The EBG will be a deployed asset, postured to respond rapidly to any contingency within the POE, including Australia's littoral environment.

**Conclusion:** WP09 provides clear guidance for the ADF. It defines the POE, articulates the maritime strategy, and provides confirmation of future warfighting systems that support the new amphibious warfare capability.

The ADF's three services must collaborate to create a credible amphibious capability. The result must be a flexible force that is agile enough to respond to the challenges and uncertainties of the 21<sup>st</sup> Century operating environment. Furthermore, the EBG will provide the Australian Government, tax payer, and regional partners with confidence against a wide range of threats in an otherwise uncertain global environment.

## *Preface*

During the 1915 Dardanelles Campaign, Australian forces conducted an opposed amphibious landing on the Gallipoli Peninsula. This famous action gave rise to a nation. Given this heritage, I have often wondered why Australia has not maintained a capable amphibious force and continued to foster an amphibious warfighting culture.

The 2009 Defence White Paper (WP09) defines the Australian Defence Force's (ADF's) primary operating environment as the sea-air gap. As such, a maritime strategy is critical in fulfilling the ADF's primary role of defending the nation. WP09 also confirmed a number of large systems acquisitions that will provide the foundation for a new amphibious warfare capability, which has been largely non-existent since WWII.

As a student at the United States Marine Corp's Command & Staff College in 2009/2010, I realised the ideal opportunity I would have to learn lessons from the world's premier amphibious force. Moreover, I recognised the value in applying those lessons to the Australian Army, as it contemplates how it can best support the ADF's new amphibious warfare capability.

I wish to acknowledge the support of my Marine Corps University mentor, Dr Eric Shibuya for his mentoring throughout the research and writing of this paper. His contribution and support is indicative of the quality and professionalism of the academic staff that reside at the Marine Corps University.

I dedicate this paper to all Australian service personnel who have courageously served on expeditionary operations, and in so doing, have reinforced our great country's democratic values and sense of freedom.

This paper specifically relates to the ADF, and is therefore written in Australian English (except when referencing US doctrine) throughout.

*"We want a sea going Army that we can launch forth anywhere at any hour's notice! Not 6 months!"*

Admiral Fisher<sup>1</sup>

*"The second conclusion is that to make the navy an effective weapon we require a military instrument capable of being used in conjunction with it.... To this end a highly trained army for such over-sea work is essential."*

General Sir Ian Hamilton<sup>2</sup>

## **Introduction**

On May 2, 2009, the Australian Government released its current defence strategy in the form of a White Paper (WP09). The strategy reinforces the fact that Australia is a maritime nation with a significant sea air gap that dominates all avenues of approach to the country. On one hand, this implies physical protection from the surrounding oceans, but on the other it presents unique challenges that demand a military force that is capable of operating in such an environment. As such, Australia requires a defence force that can execute coordinated joint operations within the air, land, and sea domains. Moreover, WP 09 requires the military to be agile enough to deal with the uncertain operating environment of the 21<sup>st</sup> Century. This environment is likely to include hybrid and unconventional threats, as well as climatic, economic, and geopolitical challenges. In essence, WP09 requires the Australian Defence Force (ADF) to be capable of responding to all such contingencies within the Asia-Pacific Region and beyond.

On the surface, it appears as though the Royal Australian Navy (RAN) will benefit the most from WP09 because of the major systems acquisitions relating to the maritime strategy. Indeed, by 2016 the RAN will take delivery of two new Landing Helicopter Dock (LHD) ships (Appendix 1), a separate strategic sea lift capability, and 8 to 12 new medium landing craft.<sup>3</sup> These systems have the potential to enhance significantly the ADF's expeditionary and amphibious warfare capability. Moreover, by fully embracing the amphibious capability, the ADF will be well postured to adapt to meet the country's strategic objectives and the contingency requirements of the 21<sup>st</sup> Century.

However, the procurement of these new platforms presents a challenge for the Australian Army to determine how it can best support the ADF's new amphibious warfare capability. This paper will detail how the Australian Army can embrace fully the concept of operational manoeuvre from the sea by investing in a battle group that is combat ready and permanently embarked to respond to future overseas contingencies and operations in defence of the homeland.

### **Emerging Threats & Australia's Future Strategic Operating Environment**

The term littoral refers to the intersection of air, land, and sea; therefore the ADF must be capable of operating in all three environments with joint forces. Furthermore, it should be recognized that, "modern warfare is synonymous with joint warfare."<sup>4</sup> This is particularly true for the ADF, as its primary operating environment (POE) encompasses an archipelagic region. Ocean dominates the world's surface, and 60% of the world's population reside less than 100 kilometres from the ocean.<sup>5</sup> The continual growth of population centres along the world's littorals will require a force that is capable of conducting rapid point of entry operations by sea, followed by sustained military operations ashore. As such, future regional contingency operations will rely heavily on maritime assets working in concert with land forces.

The ADF's most likely operating environment out to 2030 will include enduring intra-state and transnational extremist threats.<sup>6</sup> Furthermore, WP09 combined with Australia's recent experience suggests that the future operating environment will likely involve hybrid challenges. As such, "complex contingency operations will be a defining feature of the early 21<sup>st</sup> Century."<sup>7</sup> They will be complex because of physical pressures such as population growth, resource and energy dependence, and climate change. Other factors, such as the current global financial crisis, international politics, cultural and social differences as well as advances in technology will also generate further uncertainty.<sup>8</sup> Such contingencies will require Joint and interagency crisis response forces that are capable of conducting counterinsurgency, counterterrorism, humanitarian, nation-



building, and peace operations. This implies that the ADF must be trained and combat ready to conduct all types of operations across the spectrum of conflict (Appendix 2). This will likely involve operating within an environment that is consistent with what General Krulak termed the “three block war,” where “forces may be confronted by the entire spectrum of tactical challenges in the span of a few hours and within the space of three contiguous city blocks.”<sup>9</sup> Accordingly, given the nature of the threat and the future operating environment, it is important that the ADF remains postured and combat ready to hedge against all of these uncertainties.

Australia has already witnessed the effects of climate and environmental phenomena in the 21<sup>st</sup> Century, and as a consequence has had to rapidly respond to a number of disaster relief and humanitarian assistance contingencies within the Asia-Pacific Region. Two such examples include the December 26, 2004 Indian Ocean Tsunami, and the September 30, 2009 Pacific Ocean Tsunami. With a predicted increase in these types of contingency operations in the future, the ADF’s new amphibious warfare capability will provide the ideal rapid response force for humanitarian assistance and disaster relief operations ashore.

### **2009 Defence White Paper & the Strategic Implications**

WP09 provides Australia’s national defence strategy and details the following three strategic planning considerations:

- The POE is the sea-air gap to the north of Australia.<sup>10</sup>
- The four principal tasks for the ADF include:
  - Deter and defeat attacks on Australia,
  - Contribute to security and stability in the South Pacific and Timor-Leste,
  - Contribute to military contingencies in the Asia-Pacific Region, and
  - Contribute to military contingencies in support of global security.<sup>11</sup>
- Future amphibious related capability priorities for the three services including the

following (see Appendix 3 for the complete priority list):

- Two LHDs and 24 new naval helicopters for the RAN,
- 1,100 protected combat vehicle systems and 10 Battle Groups for the Army, and
- 100 Joint Strike Fighter and 8 maritime patrol aircraft for the Royal Australian Air Force.<sup>12</sup>

The new amphibious capability represents an enormous financial commitment for the Department of Defence. In order to exploit the opportunities presented by the capability, it is important that all three services embrace it and contribute to its development. In reference to the army's developing capabilities in a recent speech to the Royal United Services Institute, the Chief of Army reinforced the "need to integrate these platforms into combined arms teams which are able to base themselves on, and launch from, the new Canberra Class amphibious assault ships."<sup>13</sup> This commander's intent coincides with WP09, which states that the land force must be able to operate as combined arms teams and "undertake combat in our littoral environment" as well as "amphibious manoeuvre, and stabilisation and reconstruction operations in our immediate neighbourhood."<sup>14</sup> In many militaries, such as the US and UK, the amphibious role is fulfilled by a dedicated Marine Corps. The ADF does not have a Marine Corps however, and due to force size and resource limitations it does not require one. The role of the ADF's amphibious land force therefore must reside with the Australian Army rather than the RAN, because the army has the size and existing skill sets from which to build on. The Chief of Army's direction, combined with WP09 therefore provides the army with the essential task of remediating its amphibious warfare capability.

The combined arms approach is nothing new; it is how the Australian Army has operated for over a decade, specifically in theatres such as Timor-Leste, Afghanistan, and Iraq. Indeed, it could be argued that since this is how the Australian Army fights (as battle groups), it is also how it should be permanently organised, trained, and garrisoned. The US Army for example, recently

underwent a significant re-organisation where its Brigades transformed into Brigade Combat Teams. The aim of the transformation was to transition from a legacy-based structure to a more flexible, expeditionary force.<sup>15</sup> The Australian Army regularly deploys as an expeditionary force; therefore it must transform in order to accurately reflect this role and ultimately enable it to more effectively contribute to the new amphibious warfare capability.

### **Australia's Amphibious Warfare Culture**

The ADF has a proud amphibious heritage, which dates back to the First World War. In 1915, the nation was baptised when Australian servicemen demonstrated extraordinary courage, mateship, endurance, and self-sacrifice during the execution of an opposed amphibious landing at Gallipoli. Australians consider Gallipoli to be hallowed ground and honour those who fought and died there by commemorating the April 25 landings every year. Gallipoli was a catastrophic military failure; analysis of the campaign has produced a myriad of publications that reveal the many lessons learned, and have contributed to the development of amphibious doctrine around the world.

In the Second World War, Australian forces combined with US Forces to execute an amphibious island hopping campaign in the Pacific Theatre. During the war, the 1<sup>st</sup> Australian Corps proved to be a capable and effective amphibious force. Since the end of WWII however, the ADF's amphibious warfare capability has significantly declined, virtually to the point of non-existence. Since Australia placed such great emphasis on amphibious operations during both World Wars, it is surprising that the ADF has not strived to maintain a capable amphibious force and continued to foster an amphibious warfighting culture.

The ADF's release of the joint operating concept of Manoeuvre Operations in the Littoral Environment (MOLE) in 2004 helped reinvigorate the ADF's attitude towards amphibious operations. Until now however, it has resulted in little more than rhetoric. Nevertheless, with the introduction of two new LHDs and major supporting systems, the ADF can truly embrace and adopt

MOLE as its joint warfighting concept. This is essential, as the new amphibious capability will not only re-generate an amphibious culture, but more importantly it will provide an agile force that can decisively respond to future threats, natural disasters, and other contingencies within Australia's POE.

### **Australia's New Amphibious Warfare Capability**

The Chief of the RAN's Amphibious Capability Strategic Plan 2005 states that, "by 2016 we will have an effective Standing Joint Amphibious Task Force capable of contributing significantly to a wide range of Military Strategic Objectives set by the Australian Government."<sup>16</sup> With the release of WP09, the Australian Government has now set those objectives. Obviously, it is time for the Australian Army to act, by determining how it can best support the RAN in developing this Standing Joint Amphibious Task Force.

In the words of Basil Liddell Hart, "A small but highly trained (amphibious) force striking out of the blue at a vital spot can produce a strategic effect out of all proportion to its slight numbers."<sup>17</sup> Some commentators argue that the Australian Army is too small to maintain a permanently embarked Expeditionary Battle Group (EBG). The reality is however, the Australian Army is too small not to develop such a capability.<sup>18</sup> Indeed, an EBG will provide the ADF with increased flexibility and create a combat multiplying effect against potential adversaries.

The Australian Army currently maintains a ready battalion group and a deployable battle group on high readiness for contingency operations. Historically, when Australian forces deploy by sea, precious time is often wasted embarking the organisation on one of the RAN's in-service platforms, or on a chartered vessel. A battle group permanently embarked with the Amphibious Ready Group (ARG) would alleviate this unnecessary time lag.<sup>19</sup> It would maintain high readiness levels and reduce the friction associated with short notice loading requirements. Furthermore, the types of capabilities that the ARG would provide the Australian Government include the following:

- Military liaison;
- Maintenance of a continuous presence in waters within the POE;
- Rapid deployment of forces into crisis regions without the need to reveal exact intentions;
- Deterrence posturing of a force over the horizon from a potential adversary;
- Rapid projection of combat power ashore;
- Deployment of additional forces into a theatre of operations;
- Ability to operate with a minimal footprint ashore as a result of sea basing (both for logistics and rotary wing aviation assets);
- Combat operations ashore;
- Securing of points of entry for follow on forces;
- Rapid withdrawal of forces on completion of an operation;
- Humanitarian assistance / disaster relief;
- Non combatant evacuation operations;
- Short notice peacekeeping operations;
- Enhanced contribution to the Defence Cooperation Program through an increased military presence; and
- Foreign military training (individual, collective, and combined training exercises).<sup>20</sup>

Without reservation, the EBG will be a combat multiplier that will ultimately provide the ADF with a similar capability to the United States Marine Corp's (USMC's) Marine Expeditionary Unit (MEU).

This Paper does not aim to recommend the establishment of a Marine Corps within the ADF. Instead, it vindicates the requirement for an expeditionary capability that can be best achieved

through close collaboration between the Australian Army and the RAN. Moreover, because Australia does not have a Marine Corps, it is important that it observes and learns valuable lessons from countries that do, such as the US and the UK. Indeed, the US has the largest and most formidable amphibious force in the world. As such, it is essential that the ADF draw from the USMC's Marine Air Ground Task Force (MAGTF) experiences and lessons learned in order to expedite the establishment of an effective amphibious warfare capability.

### **Lessons Learned from the USMC**

The 13th Commandant of the USMC, General John LeJeune maintained comprehensive documentation pertaining to lessons learned from the Gallipoli Campaign. His analysis significantly contributed to the development of the USMC's amphibious doctrine, which ultimately resulted in the publication of the *Tentative Manual for Landing Operations, 1934*.<sup>21</sup> General LeJeune also proposed the following mission statement for the USMC in 1922: "Supply a mobile force to accompany the Fleet for operations ashore in support of the Fleet."<sup>22</sup> Unquestionably, General LeJeune's commitment to the development of amphibious warfare doctrine contributed significantly to its successful application during the Second World War.

More recently, the 31<sup>st</sup> Commandant of the USMC, General Charles Krulak proclaimed, "we must not be lulled into complacency because we will have always been ready, relevant, and capable.... We will remain relevant only if we are willing to meet future challenges and adapt to new needs."<sup>23</sup> These comments are equally relevant to the Australian Army and its adaption to the new amphibious warfare capability and the associated concept of Operational Manoeuvre from the Sea (OMFTS). As such, the Australian Army must also be pro-active and rapidly stand up an EBG that is permanently embarked, and *ready, relevant, and capable* to meet the ADF's future challenges.

The MAGTF, which is comprised of a Marine Expeditionary Force, Marine Expeditionary

Brigade, or a MEU, is a formidable task organised asset. It is an “independent, self-contained package – one call get’s it all.”<sup>24</sup> Furthermore, it is a “totally integrated, combined arms, air-ground-logistics team under the vision and focus of a single commander.”<sup>25</sup> The MAGTF structure (Appendix 4) is comprised of a Command Element, Ground Combat Element, Air Combat Element, and Logistics Combat Element. Despite the obvious advantages of the structure, during the past 15 years the MAGTF’s relevance has been questioned. In fact, a number of military commentators have argued that all future combat will be Joint in nature with a single Joint Task Force (JTF) commander, therefore why maintain a separate MAGTF within a Joint force?<sup>26</sup> The answer is clear; the MAGTF is a *self-contained package* that provides the JTF commander with a combat multiplying capability. The MAGTF fully adopts the single battle concept (Appendix 5), where it is capable of conducting simultaneous shaping operations in the *deep* with air assets, decisive operations in the *close* with ground and air assets, and sustaining operations in the *rear* (including from a sea base) with logistics assets.

How is this relevant to the Australian Army and its support of the ADF’s new amphibious warfare capability? The Australian Army is small in comparison to the USMC; therefore, the only MAGTF formation relevant to the Australian situation is the MEU, or what will be referred to in Australian terms as the EBG. The role of the MEU is to provide a forward-deployed unit capable of quickly reacting to “sea-based, crisis response options in either a conventional amphibious/expeditionary role or in the execution of maritime special operations.”<sup>27</sup> The USMC has three permanently embarked MEUs that perform similar missions to those that will be executed by the EBG. The MEU provides the US military with an important capability, as it helps to influence US national interests within the Atlantic and Pacific Fleet areas of responsibility. Two recent examples that demonstrate the MEU’s utility include the rapid response force that provided humanitarian assistance in the wake of the 2004 Tsunami, and the provision of an amphibious

reaction force capability in support of the 1999 Australian led intervention force operations in Timor-Leste. These examples clearly highlight the value of the MEU and demonstrate how an equivalent EBG would significantly enhance the Australian Government's ability to influence its national interests within the Asia-Pacific Region.

### **Amphibious Versus Expeditionary**

The terms amphibious and expeditionary are sometimes confused, and as a result they are often erroneously used interchangeably. Even the USMC has changed back and forth between the terms. A clear example being the title of its intermediate officer's course changing from Amphibious Warfare School to Expeditionary Warfare School. According to a former USMC Commandant, General Gray, the term expeditionary "more accurately reflects Marine Corps missions and capabilities."<sup>28</sup> General Gray went further by stating that the primary reason for the name change was to shape the way Marines think. They need to see the Corps as "an expeditionary intervention force with the ability to move rapidly, on short notice, to wherever needed to accomplish what is required."<sup>29</sup>

For the purpose of this Paper, the two terms, amphibious and expeditionary should be defined further, in order to determine what the ADF capability requirement actually is. Amphibious operations are "military operations launched from the sea by an amphibious force embarked in ships or craft with the primary purpose of introducing a landing force ashore to accomplish the assigned mission."<sup>30</sup> Expeditionary operations are those conducted by a military force "to accomplish a specific objective in a foreign country."<sup>31</sup>

The question is, what capability does the Australian Army need to provide for the ADF, and what are the training standards that must be achieved? The ADF requires a force that is expeditionary in nature, capable of operating in foreign lands without the support of Australian or coalition bases or facilities.<sup>32</sup> The organisation must have operational reach that will facilitate force



projection into littoral regions and beyond.<sup>33</sup> The EBG must be capable of conducting anything from humanitarian assistance/disaster relief operations to full spectrum warfighting operations with coalition partners. Although the EBG will be capable of conducting amphibious operations as part of its mission role, during the embryonic development stage it will not train to a level of proficiency whereby it can conduct opposed amphibious landings. Training for the EBG will be discussed later in this Paper.

The term amphibious does not sufficiently cover the EBG's role. The EBG provides a much greater capability, of which amphibious operations are just one subset. Thus, the way in which the Australian Army can best support the ADF's new amphibious warfare capability is by providing a standing expeditionary force - an EBG afloat.

### **ADF Amphibious Warfare Doctrine**

The ADF's joint warfighting concept is MOLE. As a result of current capability limitations however, the concept has not effectively guided training, structure, and capabilities of the joint force. With the introduction of the new amphibious warfare capability, this will change. Additionally, MOLE incorporates a number of additional amphibious warfare subsets that are key components of the overarching amphibious doctrine. These subsets include OMFTS, Ship to Objective Manoeuvre (STOM), Entry by Air and Sea (EAS), and sea basing.

OMFTS uses the joint components of a force to conduct manoeuvre warfare from the sea. The sea provides manoeuvre space that is generally free from physical obstacles and other complexities associated with land based manoeuvre.<sup>34</sup> This is manoeuvre warfare in its purest form, where a force such as an EBG can avoid enemy strengths and exploit his weaknesses by using a different dimension (the sea) within the available manoeuvre space. An example of effective OMFTS is the Inchon Landing executed by General MacArthur's United Nations Force on the Korean Peninsula in September 1950. The landing force at Inchon created manoeuvre space by using the sea to

dislocate geographically their adversary.<sup>35</sup> This operational envelopment enabled MacArthur's forces to sever the enemy's lines of communications and force his withdrawal.

From the USMC examples cited throughout this paper, it is evident how an EBG with organic protected mobility and rotary wing air assets embarked with the ARG, has much greater flexibility and freedom of movement than a battle group that is air landed into an airfield via traditional means. In regions such as the ADF's POE, this not only provides a significant tactical and operational advantage, it is essential due to the archipelagic nature of the environment. In fact, "if any region of the world is ideal for OMFTS it is the South West Pacific."<sup>36</sup>

The execution of STOM through "combined arms penetration and exploitation operations from over the horizon, by both air and surface means" provides a military force with a significant tactical advantage.<sup>37</sup> By embarking LHDs with troop lift, and armed reconnaissance helicopters, this concept becomes achievable for the ADF. STOM also enables forcible entry, which will be possible for the ADF in cooperation with coalition partners, once the amphibious capability fully matures. STOM essentially facilitates the rapid build-up of follow on forces. Additionally, it allows a force to cross the beachhead without the need to reduce tempo to facilitate the build-up of combat supplies ashore. The utilisation of Sea Basing eliminates this requirement. An historical example where the ADF could have employed STOM incorporating an EBG was with the build-up of Intervention forces into Timor-Leste for Operation TANAGER in September 1999.<sup>38</sup>

The Australian Army's HEADLINE Experiment calculated that a brigade-sized organisation of 3,000 personnel is required to achieve the amphibious requirements of EAS. An additional 6,000 personnel is required as part of the follow on force to conduct MOLE.<sup>39</sup> An Australian Brigade, which was later reinforced by a multinational force, demonstrated EAS during the 1999 intervention force operations in Timor-Leste. The advantage of amphibious forces in this type of situation is that they are able to develop situational awareness whilst postured off shore and over the

horizon. This ultimately enables a force such as an EBG to achieve tactical surprise and strike the enemy where he is weak. Additionally, this can facilitate operational and strategic surprise at the higher levels. The EBG can rapidly complete its land-based mission and then conduct an amphibious withdrawal before the enemy has time to react. In the case of more complex missions, the EBG can seize a point of entry for follow on forces.

Australian doctrine defines sea basing as the “protection of force projection, command and control (C2), and logistics assets from land threats by basing them at sea.”<sup>40</sup> Sea basing will become achievable for the ADF with the new amphibious platforms and will enable the EBG to conduct distributed operations in austere environments with a minimal footprint ashore. The ability to operate without the requirement for land-based infrastructure is a significant advantage that allows the ground component to project further and faster, without the burden of having to provide security forces to protect static rear areas. In this situation, the rear area is afloat and therefore the ARG is responsible for rear area security.

Sea basing ultimately enhances the operational and tactical capability of the force, by giving it the ability and flexibility to re-posture both laterally, as well as in depth.<sup>41</sup> This added dimension poses a significant dilemma for any potential adversary, as they will be denied the ability to easily predict or react to friendly force movements on the land or at sea. One essential requirement for sea basing however, is the need for a low anti-aircraft threat. This is important as rotary wing assets will replenish, reinforce, and execute casualty evacuation from the sea base; therefore, they require relative freedom of movement.

Sea basing also supports the joint integrated C2 relationship between the Commander Landing Force (CLF) and the Commander Amphibious Task Force (CATF). The combination of network-enabled command, control, communications, computers, intelligence, surveillance and reconnaissance systems facilitate this essential C2 requirement.<sup>42</sup> This networked architecture

provides a common operating picture that will integrate communications, logistics and fires capabilities and ultimately lead to greater synergy between joint components.<sup>43</sup> Moreover, this enhanced C2 capability will significantly benefit the JTF by enabling more effective and timely decision-making, aided by better situational awareness. Additionally, these considerations also support the Chief of Army's Hardened and Networked Army concept and facilitate better joint and interagency information sharing.

### **Proposed EBG Force Structure**

This Paper has highlighted why the Australian Army must provide a standing EBG in support of the ADF's new amphibious warfare capability. The next task is to define what the optimal structure is for the EBG. Contingencies and crisis are never entirely foreseeable; therefore it is unlikely that the optimal force element will be embarked for every mission. As such, a robust and flexible force structure is essential. This will allow the EBG to be modified for specific missions as required.

There is no question that the structure must be a combined arms team, interoperable with coalition partners and capable of providing its own force protection ashore. The CLF appointment will be fulfilled by a Colonel, who will maintain overall operational control of the EBG. His command element will be comprised of operations (ground and air) and intelligence staff, as well as communications operators. Additionally, the future Battle Group and Below Command, Control, and Communications System will enhance further the vital C2 function within the EBG.<sup>44</sup> Obviously, the CLF will work closely with the CATF, who will be responsible for all force elements whilst they are embarked. In the event that contingency operations are executed, the CLF will become the JTF commander. A more senior ranking officer could assume command responsibility should a specific mission require a General-ranking officer. The command element would be a standing arrangement that would involve a two-year posting for all personnel. The two-

year posting will ensure that the important relationship between the CLF, the CATF, and their staffs are developed effectively in order to provide a proficient C2 capability. Additionally, command element staff postings would ideally be staggered, in order to ensure retention of corporate knowledge and the maintenance of skill sets.

The unit commander who provides the infantry companies will be appointed the ground element commander. The ground element requires organic protected mobility and sufficient force protection to conduct operations across the spectrum of conflict.<sup>45</sup> For these reasons, the basic building block is comprised of two infantry companies, a cavalry squadron, a reconnaissance platoon, a mortar platoon, and a combat engineer troop (see Appendix 6). Furthermore, recent experience suggests that in addition to these major manoeuvre elements, the EBG should maintain organic civil military cooperation, public affairs, information operations, electronic warfare, human intelligence, and unmanned aerial systems capabilities. For virtually all missions across the spectrum of conflict, these specialist capabilities are essential and therefore should remain organic to the structure.

Neither the main battle tank nor field artillery is included in the proposed EBG ground element (Appendix 6). Should either of these combat capabilities be required for a specific contingency, they will be assigned operational control and embarked with the EBG. It is important to recognise that both tank and artillery organisations require substantial combat service support. This would clearly expand the overall size of the logistics element required to sustain the force, and therefore increase significantly the size of the embarked organisation.

The air element will primarily be comprised of the armed reconnaissance helicopter and a troop lift helicopter.<sup>46</sup> This element is an essential component of the EBG, as it provides the capability to fulfil the following tasks:

- Air mobile operations (combat assault transport) in support of the ground element;

- Offensive air support, including close air support and deep air support;
- Air reconnaissance (including armed reconnaissance, visual reconnaissance, multi-sensor imagery reconnaissance, and electronic reconnaissance);
- Air logistical support;
- Assault support;
- Battlefield illumination;
- Casualty evacuation;
- Tactical recovery of aircraft and personnel; and
- Command, control, and communications platform.<sup>47</sup>

A Combat Service Support Team from the supporting brigade will form the basis of the logistics element. The logistics element will be comprised of supply, maintenance, transport, and health support detachments. The logistics element will be capable of providing 14 days of sustainment and will maintain the EBG's rear area afloat until follow on forces establish a forward operating base (if required).

### **Sustaining the EBG Rotation**

The proposed EBG structure, rotational model, and training is based on a complete EBG operating as part of an ARG. Historically, the Australian Army's 3rd Brigade has been responsible for maintaining the EAS capability for the army. However, 3 Brigade units have been deployed overseas as often as 1 and 7 Brigade units as part of the ongoing rotation for current operations. As such, it is unrealistic to expect 3 Brigade only to sustain the EBG rotation in addition to other commitments. In the past, 1 and 7 Brigades have not possessed the number of regular infantry battalions necessary to contribute to the EAS task. With the increased number of regular battalions because of the Enhanced Land Force implementation however, this problem no longer exists.<sup>48</sup> Accordingly, all ten battle groups should contribute to the new amphibious warfare capability by

rotating through the EBG task. The risk associated with this is that it will be difficult to attain a high level of amphibious proficiency, due to the change of force elements every eight months.

Alternatively, the advantage is that all brigades will gain exposure to the new amphibious capability, and share the responsibility for operational deployments. This concept is consistent with the current rotational model used for battle group deployments to Afghanistan and Timor-Leste.

As discussed in a previous section, the USMC as the most capable amphibious force in the world is currently unable to attain a continuous high level of amphibious competency. As such, the ADF should not delay development of the capability by trying to achieve a 100% solution. Instead, it is important to stand the capability up as soon as possible, so that the army and the RAN can start developing effective tactics, techniques, and procedures. This will ensure that by 2016, the Australian Government has an enhanced maritime presence within the POE.

There is another factor that is also worthy of consideration. Until the strategic sealift vessel is brought into service during the 2016-2018 timeframe, the ADF will not be able to stand up an ARG. It should instead commence amphibious operations on a smaller scale with an Amphibious Ready Element.<sup>49</sup> As such, the EBG's ground element may have to be reduced during this period. Nevertheless, one key advantage of operating as a battle group is that capability bricks can easily be detached and attached as the need arises.

An additional planning consideration for sustaining the EBG is the LHD External Maintenance Availability schedule. Current maintenance planning indicates that each LHD should be at sea for a period of up to 180 days each year (see Appendix 7).<sup>50</sup> There will be some overlap of maintenance however, resulting in occasional time periods where the EBG will be off line. During these periods, the EBG should remain as part of the Ship's Company so that they can continue to develop standard operating procedures, as well as conduct familiarisation training whilst the ships are in dry dock. It is essential to carefully manage these maintenance periods in order to minimise

the timeframe for which there is no EBG afloat.

### **EBG Training**

In his *Marine: A Marine Expeditionary Unit*, Tom Clancy suggests that “amphibious warfare is one of the most expensive and risky forms of combat ever devised.”<sup>51</sup> Furthermore, one of the most challenging military skill sets to attain and maintain are amphibious warfare related competencies. For example, the USMC MEU’s lead up training period involves a 22-week program that incorporates both individual and collective training, and culminates in a two-week evaluation / certification exercise.<sup>52</sup> With this model in mind, it is necessary to consider the training requirements for the Australian EBG. Does the organisation need to be able to conduct an opposed amphibious landing for example? Liddell Hart once said, “landing on a foreign coast in the face of hostile troops has always been one of the most difficult operations of war.”<sup>53</sup> Realistically, the Australian Army is too small to execute such a mission on its own. It may have to support a US or UK led operation of this nature however; therefore, tasks such as amphibious assaults, raids, demonstrations, and withdrawals must be retained as part of the mission essential task list.

The reliance on joint forces to make the new amphibious warfare capability viable is clear and has significant implications for training in the future. The idea of a battle group from 1 Brigade deploying to Mount Bundy Training Area or from 3 Brigade deploying to Townsville Field Training Area for single service training is something that will undoubtedly continue due to resource limitations. Nevertheless, this practice should be minimised wherever possible. The ADF must better husband its limited resources to conduct joint training at every opportunity. This means utilising Shoalwater Bay Training Area and Bradshaw Field Training Area more regularly, so that RAN vessels can actively participate. This will be essential for EBG lead-up training, including mission rehearsal exercises prior to a unit’s eight month embarked deployment. When joint exercises are not possible, liaison officers from sister services should be present to observe the



training and participate in after action reviews. This will ensure that lessons are captured, and procedures are modified in order to ensure the effective evolution of the capability.

The ADF should regularly exercise with foreign amphibious forces, such as the USMC, and British Royal Marines in order to promote coalition interoperability. Exercises such as TALISMAN SABRE will provide excellent opportunities for combined training and certification of the joint force. There is currently no agency within the ADF that is authorized to certify the joint amphibious warfare capability, therefore bi-lateral training opportunities are essential and should be exploited.<sup>54</sup> Furthermore, it is important to embrace joint planning opportunities by partnering with organisations such as the Expeditionary Warfare Training Group, Atlantic (or Pacific). Their Joint Expeditionary Tactical Trainer has considerable utility for ADF amphibious capability development, as well as interoperability training.

Contemporary overseas contingency operations are generally more special in nature than they are conventional. As such, the USMC maintains a special operations capable (SOC) role for their MEU. The MEU SOC skills set is an enhancement of the organisation's core capabilities. As the amphibious capability matures, the EBG can potentially assume SOC responsibilities in the future. This is not a short term goal however, therefore it is important in the interim period that the 2<sup>nd</sup> Commando Regiment conducts familiarisation training with the ARG, so as to ensure that they are capable of executing special operations from the new amphibious platforms. Relative to the complexity of the task, special operations missions would likely require additional command, control, communications, and intelligence support.<sup>55</sup> The type of special operations that a SOC EBG could potentially conduct includes the following:

- Close quarter battle,
- Specialised breaching,
- Clandestine reconnaissance and surveillance,

- Tactical recovery of aircraft and personnel,
- In-extremis hostage rescue, and
- Seizure and destruction of offshore oil production facilities.<sup>56</sup>

The utility of incorporating a SOC role for the EBG is obvious and requires little justification, especially considering the current and predicted future operating environment. It must be noted however, Australia's Special Operations Command currently maintains primacy for these tasks, and due to training competency requirements a SOC role would not be achievable for the EBG during its early development stages.

### **Conclusion**

WP09 provides effective guidance for the ADF by defining the POE, reinforcing the maritime strategy, and providing confirmation of future warfighting systems that support the new amphibious warfare capability. It is now time for the three services to collaborate in order to create a credible capability. The result must be a flexible force that is agile enough to respond to the challenges and uncertainties of the 21<sup>st</sup> Century operating environment. The Australian Army can best support the new amphibious capability by developing a standing EBG embarked with the ARG. The EBG will provide the Australian Government, tax payer, and regional partners with confidence against a wide range of threats in an otherwise uncertain global environment.

The proposed EBG recommendations reflect the ADF's current *modus operandi* for operational deployments, and take into consideration lessons learned from the USMC's MEU. Additionally, the EBG's design is optimal for the most likely future operating environment, whilst taking into consideration existing limitations based on the army's current size and order of battle. The Australian Army must ultimately settle on an organisation that is robust and flexible enough to meet future regional and global challenges. With all of these factors in mind, and

through a holistic and integrated joint approach, the Adaptive Army will prevail; it will regenerate its amphibious culture and embrace the concept of OMFTS.

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Notes

<sup>1</sup> Trumbull Higgins. *Winston Churchill and the Dardanelles: A Dialogue in Ends and Means*. New York: The Macmillan Company, 1963, 75.

<sup>2</sup> Ibid.

<sup>3</sup> Lieutenant Colonel Tony Archer, "The Land Force – Expeditionary in Orientation" (Directorate of Future Land Warfare and Strategy, Australian Army Headquarters, August 14, 2009), 12.

<sup>4</sup> Mark F. Cancian. "Is the MAGTF Still Relevant." *Marine Corps Gazette* (February 1996): 32.

<sup>5</sup> Headquarters U.S. Marine Corps. *Expeditionary Operations*. MCDP3. Washington, DC: Headquarters U.S. Marine Corps, April 16, 1998, 21.

<sup>6</sup> Australian Government, Department of Defence, *Defending Australia in the Asia Pacific Century: Force 2030*. Defence White Paper 2009, Canberra: Department of Defence, 2009, 11.

<sup>7</sup> CSIS, *Beyond Goldwater-Nichols: US Government and Defense Reform for a New Strategic Era, Phase 2 Report*, Jul 2005: 45.

<sup>8</sup> United States Department of Defense. *National Defense Strategy*, Robert M. Gates. Washington, DC: Department of Defense, June 2008, 4.

<sup>9</sup> General Charles C. Krulak, "The Strategic Corporal: Leadership in the Three Block War," *Marines Magazine* (January 1999): 2.

<sup>10</sup> *Defending Australia in the Asia Pacific Century: Force 2030*, 51.

<sup>11</sup> Ibid, 53-56.

<sup>12</sup> Ibid, 70-86.

<sup>13</sup> Chief of Army Speech to RUSI (ACT Branch), 10 Dec 08.

<sup>14</sup> *Defending Australia in the Asia Pacific Century: Force 2030*, 60.

<sup>15</sup> *National Defense Strategy*, 235.

<sup>16</sup> Australia's New Amphibious Warfare Capability Brief by CMDR Iain Jarvie, RAN, Deputy Director (Navy) Joint Amphibious Capability Implementation Team, January 2009.

<sup>17</sup> Basil Liddell Hart, *History of the First World War* (London: Pan Books, 1972), 63.

<sup>18</sup> Lieutenant Colonel Justin Ellwood, "Developing Amphibiosity in the ADF: An Army Initiative" (Army Defence Staff Washington, September, 2009), 2. Emphasis added.

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<sup>19</sup> An ARG is generally comprised of three ships as follows: an amphibious assault ship such as an LHD, an amphibious transport ship such as a Landing Platform Dock (LPD), and a Landing Ship Dock (LSD).

<sup>20</sup> Amphibious Warfare Review Staff. "The Fleet Marine Forces: Rapid Response For An Uncertain Era." *Amphibious Warfare Review* (Winter/Spring 1992): 22.

<sup>21</sup> Victor H. Krulak, *First to Fight: An Inside View of the U.S. Marine Corps* (Annapolis, MD: Naval Institute Press, 1984), 81.

<sup>22</sup> Edwin H. Simmons, *The United States Marines: A History* (Annapolis, Md.: Naval Institute Press, 2003), 111.

<sup>23</sup> John T. Quinn. "The Future Fleet Landing Force." *Marine Corps Gazette* (June 1996): 25.

<sup>24</sup> Cancian, 32.

<sup>25</sup> Ibid.

<sup>26</sup> Ibid.

<sup>27</sup> Headquarters U.S. Marine Corps. "Expeditionary Manoeuvre Warfare Family of Concepts." *USMC Concepts + Programs 2005* (2005): 264.

<sup>28</sup> Brigadier General Edwin H. Simmons. "Amphibious Becomes Expeditionary." *Fortitudine* (Spring - Summer 1988): 4.

<sup>29</sup> Ibid.

<sup>30</sup> United States Department of Defense, *Joint Pub 3-02, Joint Doctrine for Amphibious Operations*, Washington, DC: 19 Sep 2001, ix.

<sup>31</sup> *Expeditionary Operations*, 31.

<sup>32</sup> Amphibious Warfare Review Staff, 20.

<sup>33</sup> *USMC Concepts + Programs 2005*, 25.

<sup>34</sup> Robert Moyse. "Manoeuvre Operations in the Littoral Environment." *Peter Mitchell Essays 2003* (2003): 71.

<sup>35</sup> Headquarters U.S. Marine Corps. *Logistics*. MCDP4. Washington, DC: Headquarters U.S. Marine Corps, February 27, 1997, 17.

<sup>36</sup> Moyse, 72.

<sup>37</sup> *USMC Concepts + Programs 2005*, 27.

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<sup>38</sup> David Kilcullen, *The Accidental Guerrilla: Fighting Small Wars in the Midst of a Big One* (New York: Oxford University Press, 2009), 186 – 192.

<sup>39</sup> Robert Moyse, 73.

<sup>40</sup> Australian Defence Force. *Littoral Environment Assessment Procedures*. ADFP 3.2.2. Canberra, ACT: Australian Defence Force.

<sup>41</sup> *USMC Concepts + Programs 2005*, 27.

<sup>42</sup> *Ibid*: 29.

<sup>43</sup> *Ibid*: 27.

<sup>44</sup> Lieutenant Colonel Tony Archer, 13.

<sup>45</sup> Protected mobility implies the Australian Light Armoured Vehicle, M113 Armoured Personnel Carrier, or the Bushmaster Protected Mobility Vehicle. These systems will be replaced in 2018 by the ADF's Land 400 future combat vehicle system.

<sup>46</sup> Lieutenant Colonel Tony Archer, 13.

<sup>47</sup> Headquarters U.S. Marine Corps. *Aviation Operations*. MCWP 3-2. Washington, DC: Headquarters U.S. Marine Corps, May 9, 2000, 2-1 – 2-6.

<sup>48</sup> The Enhanced Land Force is a \$10 billion commitment by the Australian Government. The concept, combined with the Chief of Army's Hardened and Networked Army initiative, involves the raising of two new infantry battalions, and will increase the strength of the Australian Army to 30,000.

<sup>49</sup> Lieutenant Colonel Tony Archer, 12.

<sup>50</sup> Lieutenant Colonel Jon Hawkins. "Amphibious Warfare – A Discussion Paper" (Working paper, Joint Amphibious Capability Implementation Team, June 15, 2009), 15.

<sup>51</sup> Tom Clancy, and John Gresham, *Marine: A Guided Tour of a Marine Expeditionary Unit* (New York: Berkley Books, 1996), 149.

<sup>52</sup> Expeditionary Warfare Training Group Atlantic, Brief to Joint Amphibious Capability Implementation Team, October 2008.

<sup>53</sup> *Joint Doctrine for Amphibious Operations*, 1-1.

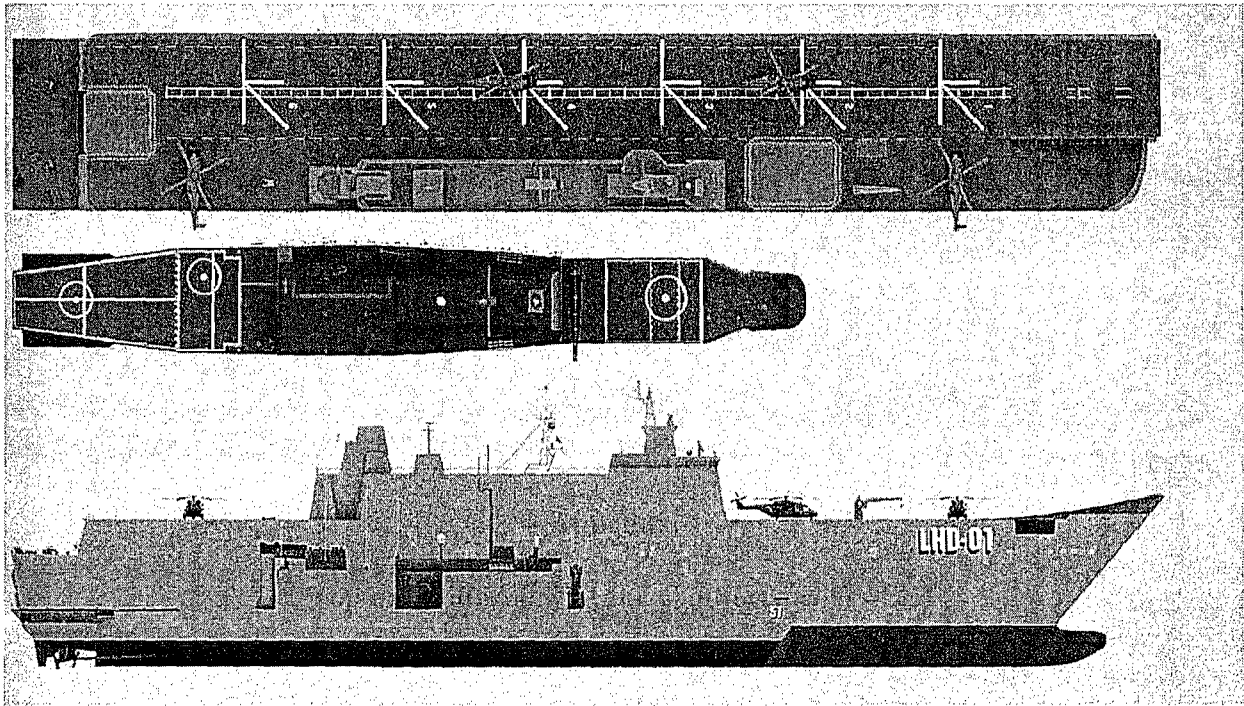
<sup>54</sup> Lieutenant Colonel Jon Hawkins, 14.

<sup>55</sup> Amphibious Warfare Review Staff, 26.

<sup>56</sup> *Ibid*: 26.

## Appendix 1

### Top and Side View of the Canberra Class LHD

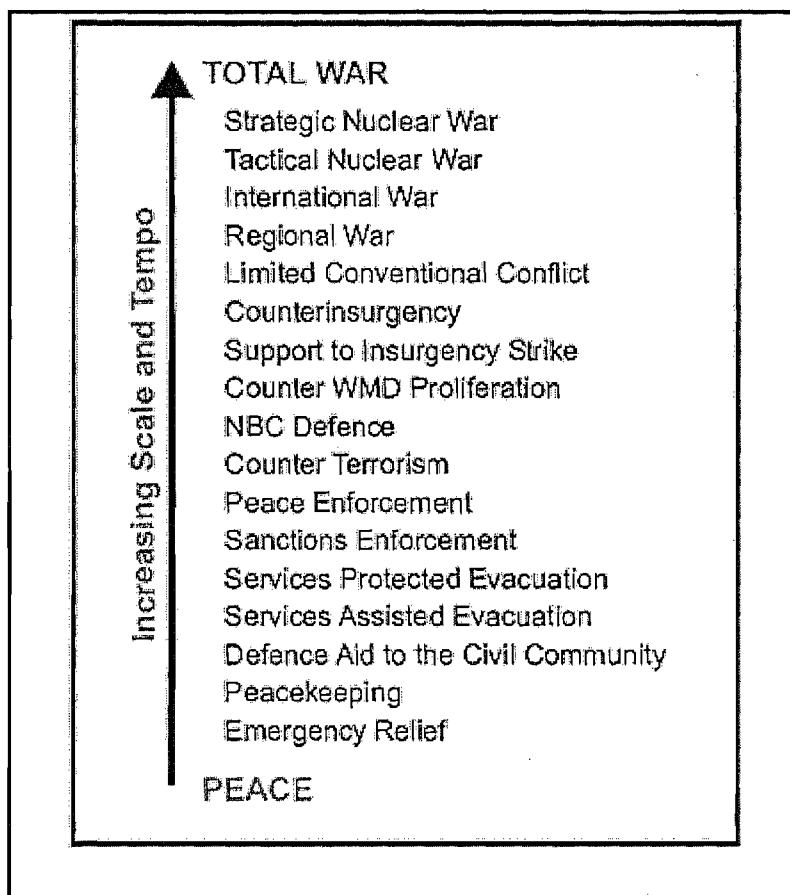


Source: Australia's New Amphibious Warfare Capability Brief by CMDR Iain Jarvie, RAN, Deputy Director (Navy) Joint Amphibious Capability Implementation Team, January 2009.

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## Appendix 2

### Spectrum of Conflict



Source: Headquarters Training Command - Army. *Land Warfare Doctrine LWD 3-01: Formation Tactics*. Australian Army, November 27, 2003.



### **Appendix 3**

#### **Australian Defence Force Major Capability Priorities out to 2030**

##### **Royal Australian Navy:**

- 12 Submarines to replace the existing 6 Collins Class Submarines.
- 3 Air Warfare Destroyers (could potentially increase to 4).
- 8 Anti Submarine Warfare capable Frigates to replace current ANZAC Class Frigates.
- 24 new naval combat helicopters to replace the current Seahawk fleet.
- 20 new Offshore Combatant Vessels to replace 26 current vessels.
- New Strategic Sealift Ship capable of amphibious offload to complement the two LHDs under construction.
- 6 new ocean-going Heavy Landing Craft.
- Land-attack cruise missile fitted to various vessels within the naval fleet.

##### **Australian Army:**

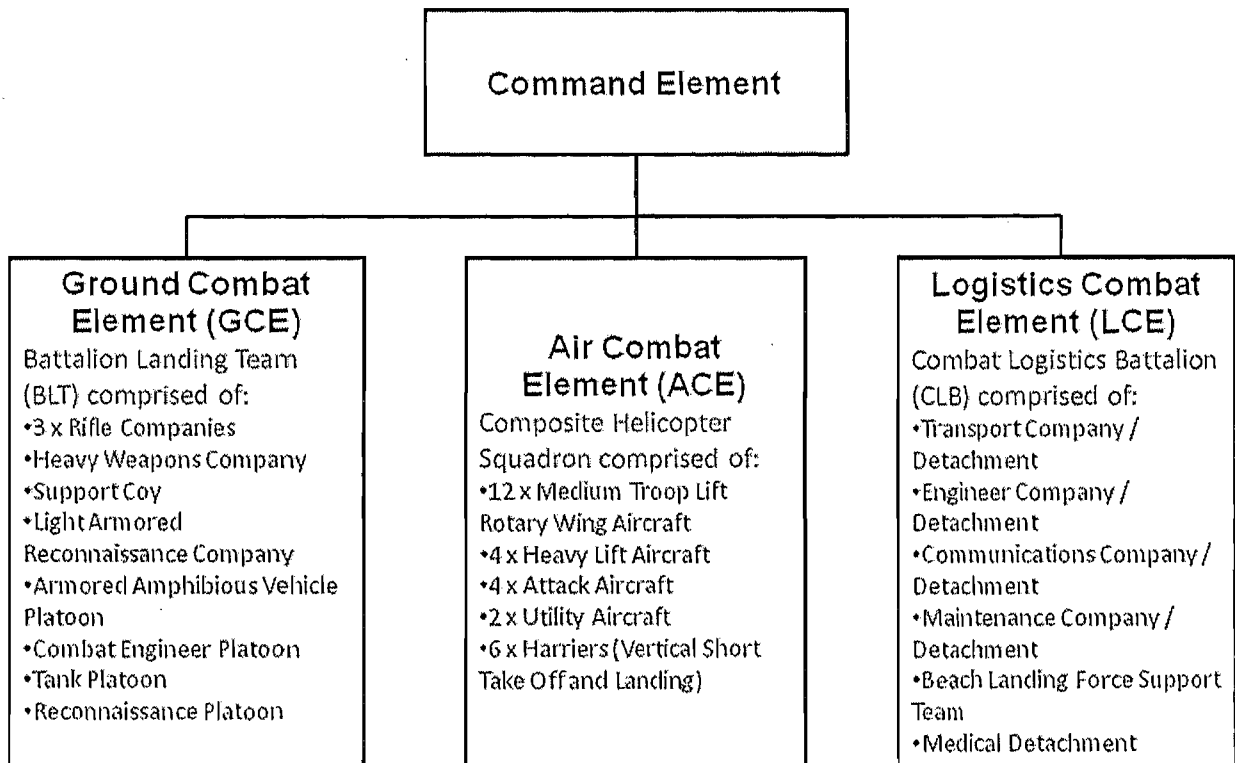
- 1100 protected combat vehicle systems.
- 7 new Chinook heavy lift helicopters.
- Self propelled and towed artillery systems.
- Complete replacement of wheeled vehicle transport and logistics fleet.
- Improved command, control, and communications equipment for land forces.
- Land force based on three combat brigades (each with approx 4000 troops) consisting of 10 battle groups.

##### **Royal Australian Air Force:**

- Approximately 100 Joint Strike Fighter Aircraft to replace current F/A18 and F-111 aircraft.
- 8 new Maritime Patrol Aircraft.
- 7 Large Maritime Unmanned Aerial Vehicles to replace AP3C aircraft.

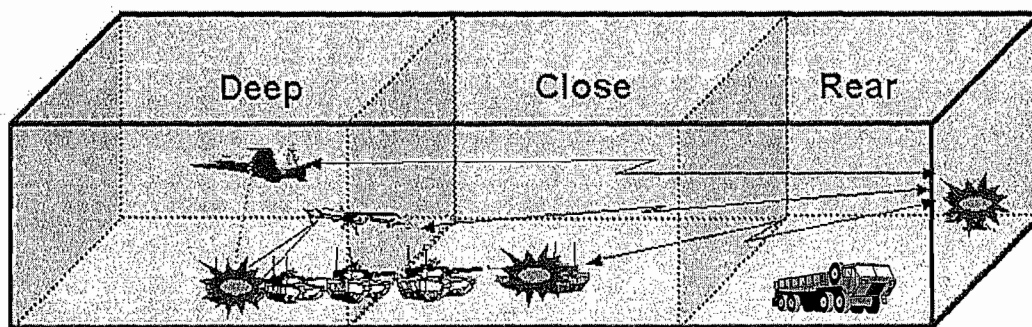
- 2 additional C130Js and 10 x battlefield airlift aircraft to replace the C130H and DHC-4 aircraft.
- New deployable Air Traffic Control radars.
- Continuation of Airborne Early Warning and Control and air to air refuelling projects, which will enhance the air combat capability.
- Upgrade of the Jindalee Over the Horizon Radar.

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**Appendix 4****USMC Marine Expeditionary Unit (MEU) Structure**

## Appendix 5

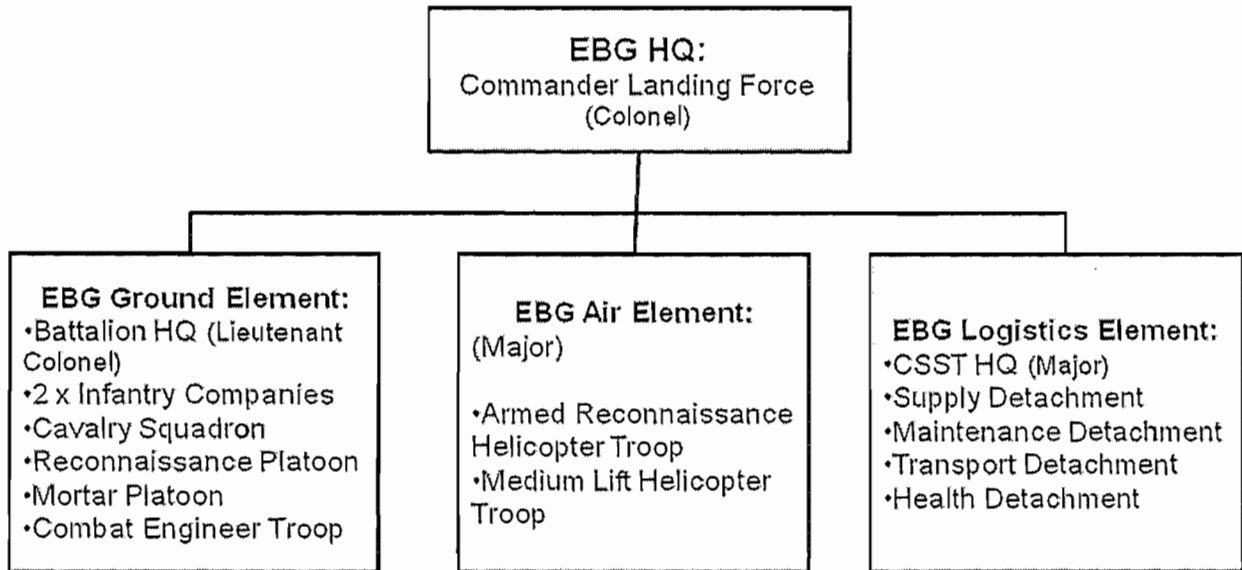
## USMC Single Battle Concept



***Action anywhere is related to action everywhere***

## Appendix 6

## Proposed Australian Expeditionary Battle Group (EBG) Structure



### Appendix 7

#### LHD External Maintenance Availability (EMA)

Platform Availability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>LHD 1: HMAS CANBERRA</b>	LEAVE	FLEET	EMA	EMA							PORT	LEAVE
<b>LHD 2: HMAS ADELAIDE</b>	LEAVE	FLEET	PORT							EMA	EMA	LEAVE

Source: Joint Project 2048 Proposed Maintenance Schedule for LHD, as at April 2009

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### Glossary

ADF	Australian Defence Force
ARG	Amphibious Ready Group
CATF	Commander Amphibious Task Force
CLF	Commander Landing Force
C2	Command and Control
EAS	Entry by Air and Sea
EBG	Expeditionary Battle Group
JTF	Joint Task Force
LHD	Landing Helicopter Dock
MAGTF	Marine Air Ground Task Force
MEU	Marine Expeditionary Unit
MOLE	Manoeuvre Operations in The Littoral Environment
OMFTS	Operational Manoeuvre from the Sea
POE	Primary Operating Environment
RAN	Royal Australian Navy
SOC	Special Operations Capable
STOM	Ship to Objective Manoeuvre
USMC	United States Marine Corps
WP09	White Paper 09

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